HP 3000
Business Computer Systems
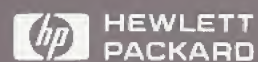
The Hewlett-Packard approach to
selecting a business computer

HEWLETT PACKARD
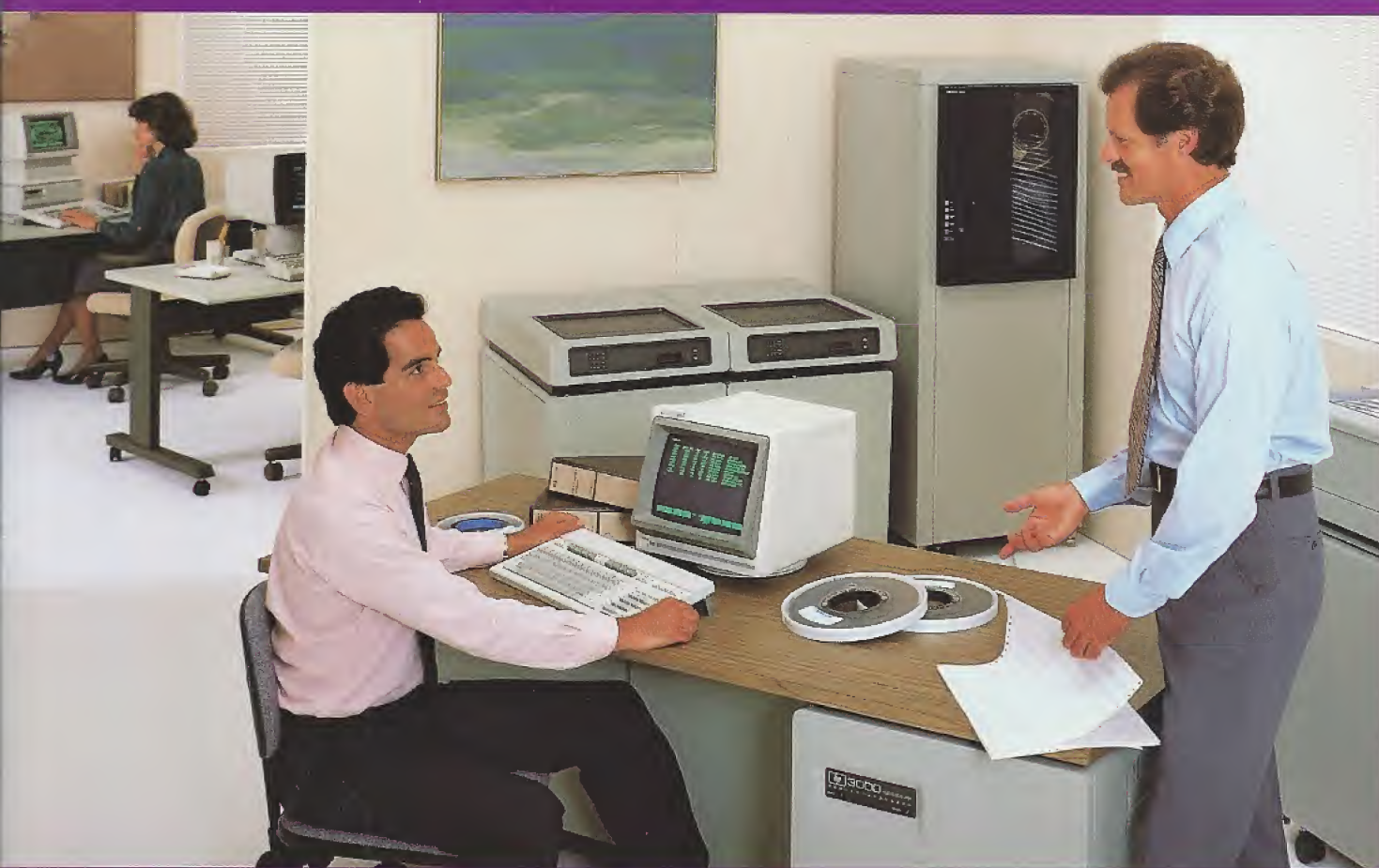
Managing a business is a tough job.
Why not choose a computer that makes it easy.

Yes, there are a lot of business computers out there. And, yes, it's difficult to decide where to put your money. But if you're like most managers, you can't spend long months choosing the system that's best for your organization. When you do decide, though, the choice had better be right for now. And for the future.

That's why several fundamental questions need answering up front. Questions like:

"Will the computer help manage your entire organization better?..."

"Does it match your specific needs?..."

"Can it grow as your organization grows?..."

"When you want to expand into networks can you?..."

"What about software—is it easy to write; easy to use?..."

The answers to these questions can have profound financial and productivity ramifications throughout your organization for years to come. That's why we would like to show you how the HP 3000 answers them. How it can help you manage every aspect of your business—not just data processing functions. And why, today, the HP 3000 is one of the world's most popular business computers.

HP 3000 ... the computer that solves business problems in every department

When you stop to analyze it, versatility emerges as one of the prime characteristics you need in a business computer. Certainly the system must be able to handle the traditional data processing jobs—payroll, number crunching, programming. But if that's all it does, then it's only halfway there. It must help you manage your organization as well.

At every level in every department, from a branch office to corporate headquarters, today's business environment demands quick decisions, fast action, immediate response, high productivity, and, above all, accurate information. That's why we developed the HP 3000. To give you a system that manages your information resources and makes them available to everyone. Not just programmers and DP people, but secretaries, accountants, production workers, managers, and other business professionals.

The technical reason the HP 3000 can handle all these jobs is its Multiprogramming Executive operating system. It lets the computer process multiple on-line and batch jobs simultaneously. While accounting runs the monthly financial summary, a clerk can enter a new sales order.

Even further, with the HP 3000 plus personal and portable computers and numerous software products, Hewlett-Packard is uniquely positioned to deliver a complete computer solution. Distributed data processing, full office automation, personal computing—all can be integrated into a single system.

Off-the-shelf applications solutions

You're aware of the cost involved in developing major applications software. We considered this also and created comprehensive applications programs to help. SFD/3000 and OM/3000 for wholesale distributors, HP Financial Accounting, and key information systems for semiconductor producers.

For manufacturers we developed Materials Management/3000 and Production Management/3000, along with other software products, to produce the most complete manufacturing solution available. Using sophisticated HP customizer techniques, these standard software products can easily be modified to fit your organization's specific methods and requirements. Everyone becomes more productive. The only sacrifice you make is in cost. It's a lot less.

Computer power for personal productivity

Today's business catch phrase is "personal productivity." But what does it mean? At Hewlett-Packard we give it a comprehensive definition that includes helping everyone in the office—managers, professionals, support staff.

The Personal Productivity Center is our way of combining the power of the HP 3000 with the flexibility of HP personal and portable computers and HP terminal workstations to give every user access to a complete range of office automation software.

Personal productivity encompasses software tools beyond word processing, or even electronic mail. It includes capabilities to create business graphics that help you interpret critical information for quick decision

making; software to produce visual aids; and HPDeskManager to manage your daily schedule, serve as an electronic filing cabinet, and communicate electronically with others in the organization. Everything you need, in fact, to fully automate the way you do business.
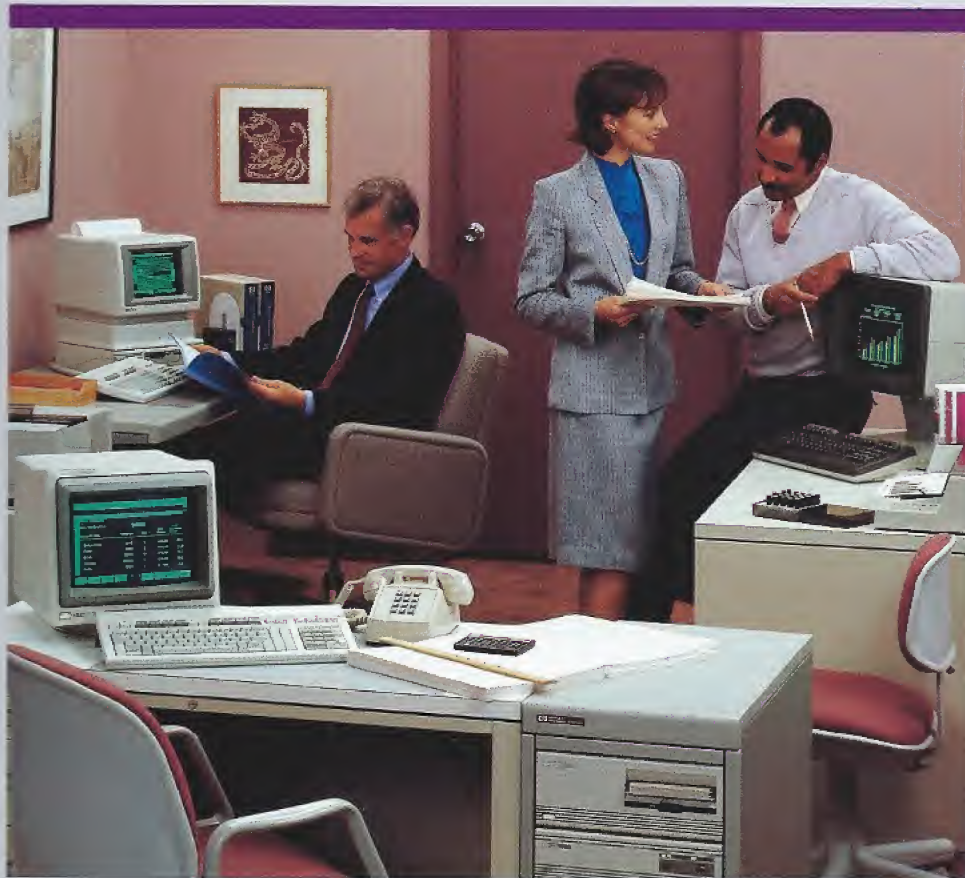
From traditional data processing to manufacturing applications, accounting, word processing, business graphics, and data communications, the HP 3000 proves that it is one of the most popular business computers in the world.

More productive programmers

You've experienced the shortage and high cost of EDP people, so you'll certainly be interested in what we've done to improve this situation. HP 3000 software products make programmers' jobs easier and can boost their productivity as much as 500%.

One of these products, RAPID/3000, drastically cuts the time it takes for a programmer to prototype and develop a user-oriented application program. Not only does it save time, but the final program is more efficient. And there are other tools too.

HPToolset, for example. An interactive COBOL program development system that speeds up programming by simplifying coding and debugging. Or APS/3000 and OPT/3000 for fine tuning system performance to achieve maximum response and throughput.

Our commitment to making your programmers more productive goes even further. There's a large selection of languages—COBOL, FORTRAN, RPG, BASIC, Pascal, SPL/3000—so programmers can choose the one that best fits the application.

Comfortable computers

Finally, you'll be glad to know your people don't have to be computer experts to use all this processing power. We've gone to great lengths to make the HP 3000 friendly and easy to use. For instance, HPMenu is a front end facility that gives users quick, step-by-step access to their programs. And terminal softkeys can easily be defined for the specific needs of any user so that one keystroke accomplishes the work of many.

So, whether you need a computer that's dedicated to data processing, shared by users in every department, or linked to a national or international network, the HP 3000 meets your requirements.

Four systems... pick the computer power and performance you need

Of course, every organization is different. And you have special requirements which the computer you purchase must meet. That's why the fully compatible HP 3000 family offers a range of systems. For as few as two users or as many as 400. You select the basic performance level that's right for the job and add appropriate software. By fully compatible we mean that any HP 3000 system purchased today can be upgraded later to a higher performance model and still operate with present software.

As a general purpose business computer, the HP 3000 manages on-line interactive sessions and batch processing simultaneously. Depending on your requirements and applications, the HP 3000 can serve as a complete and independent data processing center, as a departmental or dedicated system, or as a distributed mainframe in a network.

Numerous features of HP 3000 systems have contributed to their technical excellence. Features like data base management, multi-terminal processing, networking, multi-level security, and six programming languages. All these were pioneered by the HP 3000. Today, this tradition continues with disc I/O caching, a sophisticated technique for fast access to data bases.

Series 68. As with every HP 3000, the Series 68 distributed mainframe (above) concurrently performs on-line transaction processing, program development, batch processing, word processing, and data communications.

Series 37. Specifically designed for the business environment, the Series 37 Office Computer (right) is ideal for branch offices, departments, and small businesses.
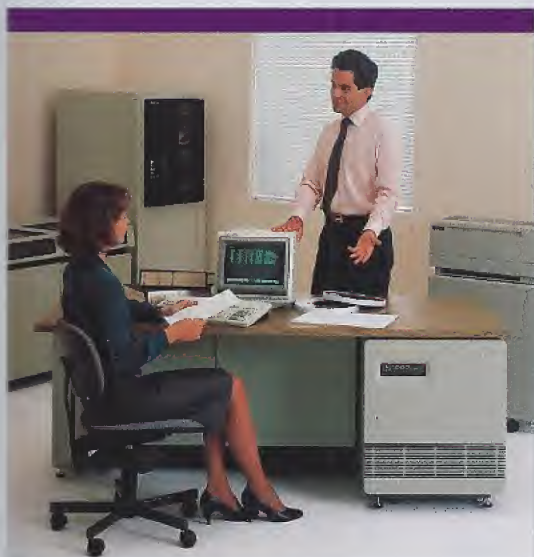
HP 3000 Family System Comparison

	Series 37	Series 42	Series 48	Series 68
Relative CPU Performance	1.0	2.0	2.0	5.0
Main Memory	.5-2Mb	1-3Mb	2-4Mb	3-8Mb
Max. No. of Devices:				
Terminals	28	92	152	400
Disc Storage (GB)	2.1	3.2	4.2	9.7
Tape Drives	2*	4	8	8
Data comm lines	3	3	7	24

*The Series 37 features easy-to-use tape cartridge for backup.

Series 48. With memory expandable from 2–4Mb and the ability to support up to 152 terminals, the Series 48 (top photo) accommodates the variety of tasks found in medium-size and larger companies.

Series 42. Cost effective in small configurations, the powerful Series 42 system (bottom photo) handles a maximum of 92 terminals.

Price and performance leadership

The HP 3000 also pioneered the market for interactive business systems used for data base oriented on-line transaction processing. Today, with over 15,000 installations worldwide, it remains the leader. Our strategy has been and continues to be to produce systems that lead the industry in price/performance.

Since the HP 3000 was first introduced, we have doubled its performance approximately every two years, and we continue to lower entry-level prices. This has been achieved through a continuous program of applying new technology to provide more affordable HP 3000 systems. The result is that among its principal competitors the HP 3000 family leads in price/performance and excels in ease-of-use.

Yet, amazingly, through all these changes and improvements, users can still run applications developed for early HP 3000s on the latest models. This is what we mean by "protecting your investment."

Growth path...
the way to meet challenges of change

Any manager involved in an organization's decision to make a capital investment in a computer must consider the realities tomorrow will bring. The realities of change. Will the computer you purchase today fit your changing, growing needs several years from now? Or, when you hit the computer's growth limits, will you have to move to an entirely different system?

With the HP 3000, we considered this challenge and developed a strategy to make growth easy. An original and basic design premise of the HP 3000 was that it should be able to grow as a customer's needs grow.

Complete software compatibility

Embedded within HP's growth philosophy is an idea that has earned the loyalty of HP 3000 owners. It's called software compatibility, the foundation of the system's ability to grow with you.

Based upon our strategy of providing technically superior products, the HP 3000 has not remained a static, unchanging system. As new technologies have developed, we've incorporated them. With the result that today's HP 3000s offer greatly increased performance and capabilities at lower cost. Yet they are still compatible with all your existing system and applications software.

But why do earlier customers appreciate this? Because we didn't leave them behind, struggling with a lower performance computer that no longer met their needs. Central to our product improvement effort has been the commitment that every HP 3000, even from the first model shipped, will be upgradable to our most powerful system. A moment's reflection, we think, will convince you of the magnitude of that commitment.

Price/Performance History of HP 3000s
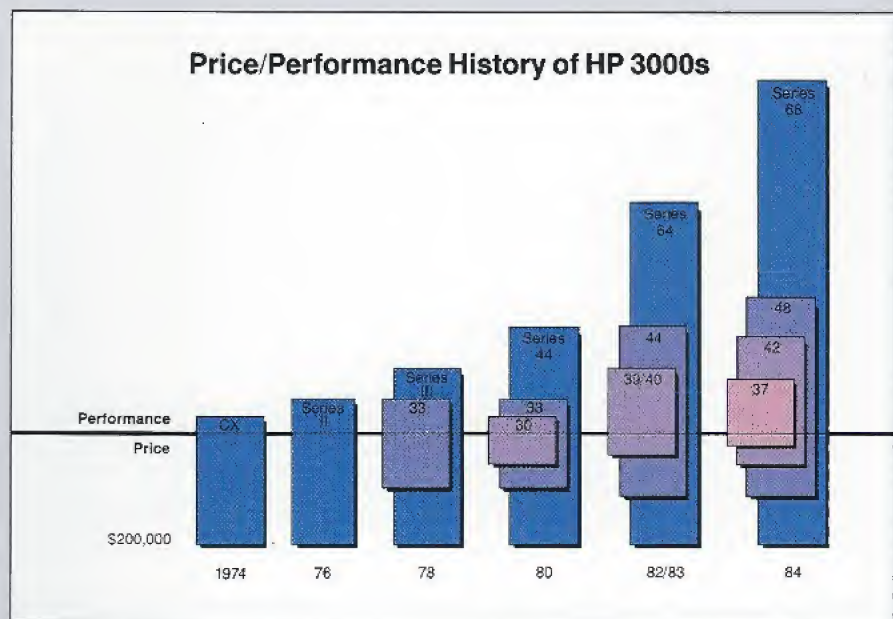
Planned growth

But what about the economic aspects of growth? We've thought of that also. Whenever you need to step up to a higher performance HP 3000, be assured that we'll offer liberal trade-in credits on your present system. And when it comes time to upgrade, there's no worry about installing the new system. Typically it's accomplished over a weekend.

A further advantage of our upgrade strategy is that you can look ahead. Plan for future growth, not just hope that you will have options later on. From the beginning you know you'll be able to match your organization's growth, by increasing your HP 3000's power.

From the introduction of the first HP 3000—the Series CX—to each succeeding model, the cost of entry-level systems has been reduced and the performance per dollar has dramatically increased. For example, the price/performance ratio of top-line HP 3000s has grown more than 40% per year, far exceeding the 30% industry average.

Operating system compatibility...
it protects your software investment

The commitment to our upgrade strategy is made possible by the HP 3000's innovative MPE operating system. MPE supervises the processing of all programs on the HP 3000. As operating system technology has developed, we've expanded and improved MPE.

The value of this approach is readily apparent when you consider that programs written for the earliest HP 3000s can still run on current models. And with no changes. Think of it. The implications are impressive.

Investment considerations

With most computer systems the investment required to develop applications software eventually far exceeds the original hardware cost. To this must be added the cost of training operators to use the software. Considering this, it's easy to understand an organization's reluctance to switch to a more powerful system as they grow, if that switch obsoletes their software. And perhaps even their printers, terminals, discs, and other peripherals as well.

Protected applications software

Migrating upward to another HP 3000 system simply does not create software problems. Your applications software can be moved, with no conversion or recompilation, from one system to another. And with no consequent lost time or personnel retraining. It's business as usual.

However, this compatibility is not just for our customers. We benefit as well. By the fact that our multimillion dollar investment in proprietary software is protected. Not only our system software like IMAGE and QUERY, but the office packages like HPDeskManager, HPWord, and Decision Support Graphics/3000; the large group of programmer productivity tools and programming languages; and the applications products for financial accounting and manufacturing productivity networks. All these sophisticated software products are available to you at a small fraction of the investment required to develop them independently. Perhaps, from your viewpoint, that is a benefit after all.

With the HP 3000 family, operating system compatibility protects your investment in software when you upgrade. Programs written for even the earliest HP 3000s will run on any comparable or larger model.

HP AdvanceNet...the communications foundation that links all your information resources

Communications is one of today's business necessities. Productivity, and even profitability, often depends on quick access to accurate business information. This is especially true in larger organizations where the data you need may lie buried deep in a computer hundreds of miles away.

This is where the HP 3000 has the capability to help. It's called HP AdvanceNet—a set of hardware and software networking products that solve your data communications information processing and control problems.

Network solutions

Reduced to its simplest terms, HP AdvanceNet provides three data communications capabilities: 1) workstation to HP computer, 2) HP Computer to HP Computer, and 3) HP Computer to mainframe. These capabilities give you the power to construct a computer network of any size and complexity. The systems may be only yards apart. Or a continent.

To bring order to the confusion of network capabilities on the market, our data communications strategy is committed to utilizing industry standards (based on the ISO Reference Model), as well as de facto standards (SNA/SDLC). Our latest advance is the PBX data communications interface, the first for any computer in this class.

The concept of networking isn't only for big installations in big organizations, however. Your network might include only a single HP 3000 and a few workstations. At the other extreme, a network could encompass a worldwide system of dozens of HP 3000s ranging from a small Series 37 to a Series 68 distributed mainframe connected to a large mainframe.

An HP AdvanceNet network links various office and data processing functions to give you better control over information resources. Workstation devices —interactive terminals, Series 100 and 200 personal computers, desktop computers, plotters, printers—all connect to HP 3000 systems. HP certifies several major PBX data communications vendors to connect HP terminals to the system through existing telephone lines, thus eliminating cabling costs. This facility, coupled with our other established capabilities for communicating between HP systems and between HP systems and mainframes, earned us the #1 ranking in Data Decisions' users' survey of overall data communications.
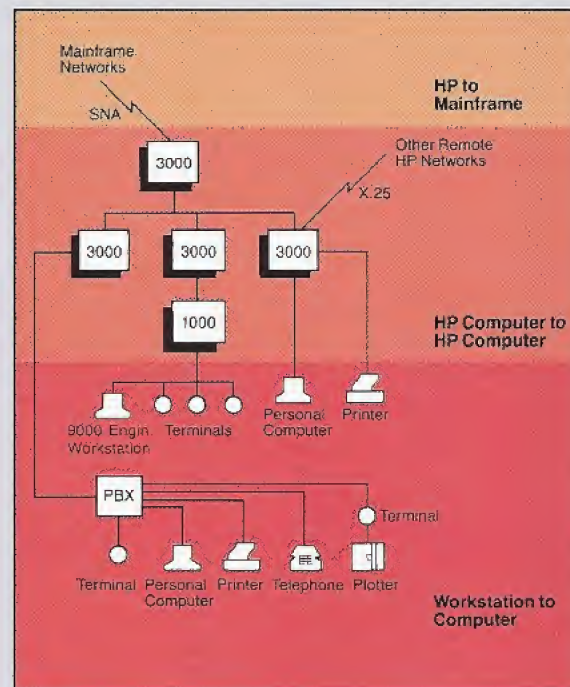
Reliability and support...
responsive service that keeps your system productive

Worldwide information management

The advantages of a network are readily appreciated when you consider the speed, accuracy, and control it offers for managing information movement. For instance, your application might involve pulling order information from remote sales offices into a central factory system. Or collecting and consolidating manufacturing information from many workstations throughout the plant and passing it to other HP systems or a mainframe.

With all these information management resources at your fingertips, HP AdvanceNet may appear to be the height of computer sophistication. Of course it is complex, yet to a user the network is completely transparent. That is, the user can access the resources of the entire network just as easily as those of a local system.

Another important service we provide is network support. Not only after installation, but during network design and implementation phases as well. And when you want to expand, we're there to help again.

HP networks provide the communications foundation to tie together all your information resources for better planning, control, and decision making.

H ewlett-Packard's concept of reliability and support goes beyond the usual to encompass the idea of helping you get the most from your HP 3000 system.

It starts with our program of establishing high engineering and manufacturing standards so the system will operate and perform to your expectations. And to ours. We want it to give you the best possible service.

Expert training for your people

The next step is to ensure that your personnel understand and feel comfortable with the system. We do this by providing exceptional system documentation and training.

Where appropriate, we've developed self-paced training courses. They're easy-to-follow courses that a user can study independently. For more intensive training, your employees may prefer the classroom courses which are regularly scheduled at the 38 Hewlett-Packard training centers worldwide. Even further, expert operational training and software consultation can be provided at your location.

Tailored support plans

Because customers' needs vary, Hewlett-Packard offers a range of support services. This way, you can tailor hardware and software support programs to your requirements and budget.

Our standard hardware support plan meets most customers' needs, but other plans are available to extend this service, if desired. There's even a plan that guarantees you 99% up-time—24 hours every day.

As with hardware, software support can be matched to your needs. Various combinations of software consultation services, training, and systems engineering are available to support your HP 3000 installation. And to keep it productive.

Questions
are the answer

In this overview of the HP 3000 systems, we've attempted to give you a sense of their capabilities and character. To show the range of systems available. How the HP 3000 can help manage your organization. Grow as you grow. And adapt to applications in every department.

Certainly, selecting a computer represents a significant investment for your organization. So, before you choose we urge you to analyze your computer needs—present and future. Ask questions. Make certain you can live with the computer you purchase.

We invite your inquiries, and would like to demonstrate how and why we think the HP 3000 can answer your questions. For additional information, please contact the nearest Hewlett-Packard office.